

## IN THE CLAIMS

## Claims 1-19 (Canceled)

20. (Currently Amended) An electrically conductive hydroprimer for plastics comprising
- I) at least one component comprising
    - A) at least one aqueous polyurethane dispersion and
    - B) at least one electrically conductive pigment; and
  - II) at least one component comprising at least one polyisocyanate,
- wherein at least one of the components I and II comprise at least one aromatic solvent that is at least one of mononuclear aromatic, polynuclear aromatic, mononuclear heteroaromatic, and/or polynuclear heteroaromatic,
- wherein the aromatic solvent is unsubstituted or is mono-, di-, or tri-substituted by at least one of an alkyl group, a cycloalkyl group, a perhaloalkyl group, a perhalocycloalkyl alkyl group, a cycloalkoxy group, a perhaloalkyloxy group, a nitrile group, a nitro group, and/or a halogen atom, and
- optionally, wherein the alkyl group, the cycloalkyl group, the perhaloalkyl group, the perhalocycloalkyl alkyl group, the cycloalkoxy group, and/or the perhaloalkyloxy group can be linked cyclically to the aromatic nucleus or nuclei
- wherein the mononuclear aromatic is at least one of benzene, pseudocumene, hemellitene, ethyl-benzene, cumene, p-cymene, tert-butylbenzene, chlorobenzene, o-dichlorobenzene, m-dichlorobenzene, p-dichlorobenzene, fluorobenzene, o-difluorobenzene, m-difluorobenzene, p-difluorobenzene, perfluorobenzene, nitrobenzene, benzonitrile, methoxybenzene, and/or ethoxybenzene.
21. (Previously Presented) The hydroprimer of claim 20, wherein the aromatic solvent is present in the hydroprimer in an amount from 0.1 to 10% by weight based on the total weight of the hydroprimer.
22. (Canceled)
23. (Canceled)

24. (Currently Amended) The hydroprimer of claim 20, wherein the aromatic solvent is selected from the group consisting of benzene, ~~toluene, o-xylene, m-xylene, p-xylene, mesitylene,~~ pseudocumene, hemellitene, ethyl-benzene, cumene, p-cymene, tert-butylbenzene, chlorobenzene, o-dichlorobenzene, m-dichlorobenzene, p-dichlorobenzene, fluorobenzene, o-difluorobenzene, m-difluorobenzene, p-difluorobenzene, perfluorobenzene, nitrobenzene, benzonitrile, methoxybenzene, ethoxybenzene, thiophene, and mixtures thereof.
25. (Currently Amended) The hydroprimer of claim 20, wherein the polyurethane dispersion comprises at least one polyester-polyurethane containing at least one of a cationic functional group; a functional group that can be converted into a cation by at least one of a neutralizing agent and a quaternizing agent; an anionic functional group; a functional group that can be converted into an anion by a neutralizing agent; and/or a nonionic functional group based on a polyalkylene ether.
26. (Currently Amended) The hydroprimer of claim 25, wherein the functional group that can be converted into a cation is at least one of a primary amino group, a secondary amino group, a tertiary amino group, a secondary sulfide group, and/or a tertiary phosphine group; wherein the cationic functional group is at least one of a secondary ammonium group, a tertiary ammonium group, a quaternary ammonium group, a tertiary sulfonium group, and/or a quaternary phosphonium group; wherein the functional group that can be converted into an anion is at least one of a carboxylic acid group, a sulfonic acid group, and/or a phosphonic acid group; and wherein the anionic functional group is at least one of a carboxylate group, a sulfonate group, and/or a phosphonate group.
27. (Currently Amended) The hydroprimer of claim 20, wherein the polyester-polyurethane comprises a reaction product of
- a polyesterpolyol
  - a compound that provides at least one of a cationic functional group; a functional group that can be converted into a cation by at least one of a neutralizing agent and a quaternizing agent; an anionic functional group; a functional group that can

be converted into an anion by a neutralizing agent; and/or a nonionic functional group based on a polyalkylene ether, and  
iii) a polyisocyanate, and  
optionally at least one of a polyamine and an amino alcohol.

28. (Currently Amended) The hydroprimer of claim 20, wherein the polyesterpolyol comprises a reaction product of

i) at least one of a polycarboxylic acid and/or an esterifiable derivative of a polycarboxylic acid, and optionally further including a monocarboxylic acid, wherein

i-a) the polycarboxylic acid is unsulfonated or sulfonated

i-b) the polycarboxylic acid is saturated or unsaturated,

i-c) the esterifiable derivative of a polycarboxylic acid is unsulfonated or sulfonated, and

i-d) the esterifiable derivative of a polycarboxylic acid is saturated or unsaturated,

and

ii) at least one of a saturated polyol and/or an unsaturated polyol and optionally further including a monool.

29. (Previously Presented) The hydroprimer of claim 20, wherein the electrically conductive pigment is selected from the group consisting of a metal pigment, a conductivity black pigment, a doped pearlescent pigment, a conductive barium sulfate, and mixtures thereof.

30. (Currently Amended) The hydroprimer of claim 20, wherein the hydroprimer further comprises at least one of an electrically nonconductive pigment and/or a coatings additive.

31. (Previously Presented) The hydroprimer of claim 20, wherein the hydroprimer has a solids content of from 30% to 80% by weight based on the weight of the hydroprimer.

32. (Currently Amended) A process comprising applying the hydroprimer of claim 20 to a substrate to produce a multicoat paint system, wherein the paint system is one of a color paint system, an effect paint system, and/or a color and effect paint system.
33. (Previously Presented) A process for producing a multicoat paint system on a plastic part, wherein the paint system is one of a color paint system, an effect paint system, and a color and effect paint system, comprising
- I) applying the hydroprimer of claim 20 to the plastic part to provide a hydroprimer film, and one of
    - Ia) heat curing the hydroprimer film to give an electrically conductive hydroprimer coating, or
    - Ib) drying the hydroprimer film, applying a light-colored hydroprimer film, and jointly heat curing the hydroprimer film and the light-colored hydroprimer film to give an electrically conductive hydroprimer coat and a light-colored hydroprimer coat; and
  - II) one of
    - IIa) applying a solid-color topcoat material to form a film and heat curing the solid-color topcoat film to give a solid-color topcoat, or
    - IIb) applying an aqueous basecoat material to form a film and partially drying the aqueous basecoat film, applying a clearcoat material, and curing the resultant clearcoat film and the aqueous basecoat film jointly to give a basecoat and a clearcoat, wherein the curing is one of i) heat curing or ii) heat curing and a curing with actinic light.
34. (Previously Presented) The process of claim 33 further comprising coating the clearcoat with a further clearcoat material to form a further clearcoat film and curing the further clearcoat film to give a mar resistant clearcoat, wherein the curing is one of i) heat curing or ii) heat curing and a curing with actinic light.
35. (Currently Amended) The process of claim 33, wherein the plastic part is one of an automobile body and/or a commercial vehicle cab.
36. (Currently Amended) The process of claim 33, wherein at least one of:

- A. the aromatic solvent is present in the hydroprimer in an amount from 0.1 to 10% by weight based on the total weight of the hydroprimer;
- ~~B. the aromatic solvent is selected from the group consisting of mononuclear aromatic, polynuclear aromatic, mononuclear heteroaromatic, and polynuclear heteroaromatic, wherein the aromatic solvent is unsubstituted or is mono-, di-, or tri-substituted by at least one of an alkyl group, a cycloalkyl group, a perhaloalkyl group, a perhalocycloalkyl alkyl group, a cycloalkoxy group, a perhaloalkoxy group, a nitrile group, a nitro group, and a halogen atom, and optionally wherein the alkyl group, the cycloalkyl group, the perhaloalkyl group, the perhalocycloalkyl alkyl group, the cycloalkoxy group, and the perhaloalkoxy group can be linked cyclically to the aromatic nucleus or nuclei;~~
- ~~C. the aromatic solvent is at least one of a mononuclear aromatic and a mononuclear heteroaromatic;~~
- ~~D. the aromatic solvent is selected from the group consisting of benzene, toluene, o-xylene, m-xylene, p-xylene, mesitylene, pseudocumene, hemellitene, ethylbenzene, cumene, p-cymene, tert-butylbenzene, chlorobenzene, o-dichlorobenzene, m-dichlorobenzene, p-dichlorobenzene, fluorobenzene, o-difluorobenzene, m-difluorobenzene, p-difluorobenzene, perfluorobenzene, nitrobenzene, benzonitrile, methoxybenzene, ethoxybenzene, thiophene, and mixtures thereof;~~
- EB. the polyurethane dispersion comprises at least one polyester-polyurethane containing at least one of a cationic functional group; a functional group that can be converted into a cation by at least one of a neutralizing agent and a quaternizing agent; an anionic functional group; a functional group that can be converted into an anion by a neutralizing agent; and a nonionic functional group based on a polyalkylene ether;
- FC. the polyester-polyurethane comprises a reaction product of
- i) a polyesterpolyol
  - ii) a compound that provides at least one of a cationic functional group; a functional group that can be converted into a cation by at least one of a neutralizing agent and a quaternizing agent; an anionic functional group; a

functional group that can be converted into an anion by a neutralizing agent; and a nonionic functional group based on a polyalkylene ether, and

iii) a polyisocyanate, and

optionally at least one of a polyamine and an amino alcohol;

GD. the polyesterpolyol comprises a reaction product of

i) at least one of a polycarboxylic acid and an esterifiable derivative of a polycarboxylic acid, and optionally further including a monocarboxylic acid,

wherein

i-a) the polycarboxylic acid is unsulfonated or sulfonated

i-b) the polycarboxylic acid is saturated or unsaturated,

i-c) the esterifiable derivative of a polycarboxylic acid is unsulfonated or sulfonated, and

i-d) the esterifiable derivative of a polycarboxylic acid is saturated or unsaturated,

and

ii) at least one of a saturated polyol and an unsaturated polyol and optionally further including a monool;

HE. the electrically conductive pigment is selected from the group consisting of a metal pigment, a conductivity black pigment, a doped pearlescent pigment, a conductive barium sulfate, and mixtures thereof;

HF. the hydroprimer further comprises at least one of an electrically nonconductive pigment and a coatings additive; and/or

JG. the hydroprimer has a solids content of from 30% to 80% by weight based on the weight of the hydroprimer.

Claims 37-42 (Canceled)